# INLAND COUNTIES EMERGENCY MEDICAL AGENCY



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May 17, 2005

TO:

Invo, Mono and San Bernardino Counties EMCC Members

Base Hospital ED Directors, Nurse Managers, PLNs Receiving Hospital ED Directors, Nurse Managers

ALS Providers BLS Providers

EMS Aircraft Providers
EMS Training Institutions

FROM:

Virginia Hastings, Executive Director

Conrad Salinas, M.D., Medical Direct

SUBJECT:

ICEMA Quality Improvement Core Indicators – 30-day Comment Period

Enclosed are the Cardiac Core Indicators that are proposed to be included as part of the ICEMA Quality Improvement Plan, Appendix M.

## **Pulseless V-Fib or V-Tach – Unwitnessed:**

CA1C AED Performed by EMS Personnel

CA1E Prehospital Defibrillation: Frequency of Administration

### Pulseless V-Fib or V-Tach - Witnessed

CA2C AED Performed by EMS Personnel

CA2E Prehospital Defibrillation: Frequency of Administration

CA2H Epinephrine: Frequency of Administration

CA2J Lidocaine: Frequency of Administration

These indicators were developed utilizing the Quality Improvement Sample Indicators prepare d by the State EMS Authority Vision Group D, system Evaluation and Improvement Group. The ICEMA QI Committee reviewed all cardiac indicators and recommended inclusion and changes. The indicators will be utilized by ICEMA and the QI Committee to evaluate the EMS system and make recommendations for improvement as indicated.

The following sample State indicators were omitted due to either inability to obtain the data or relevance in evaluating the EMS system. These indicators will be reviewed again in the future to determine usefulness in evaluating the system and ability to collect needed data.

## Pulseless V-Fib or V-Tach – Unwitnessed:

CA1A Bystander CPR

CA1B Defibrillation Performed by Bystander

CA1D Lapse of Time to First Shock 10 mins or less

CA1F Prehospital Defibrillation: Number of Shocks Delivered per

CA1G Prehospital Defibrillation: Desired Effect Achieved

CA1H Epinephrine: Frequency of Administration

CA11 Epinephrine: Desired Effect Achieved

CA1J Lidocaine: Frequency of Administration

CA1K Lidocaine: Desired Effect Achieved

CA1L Return of Spontaneous Circulation (ROSC)

CA1M Admit to Emergency Department

CA1N Survival to Hospital Discharge

#### Pulseless V-Fib or V-Tach – Witnessed

CA2A CPR Performed by Bystander

CA2B Defibrillation Performed by Bystander

CA2D Lapse of Time to First Shock 10 mins or less

CA2F Prehospital Defibrillation: Number of Shocks Delivered per Patient

CA2G Prehospital Defibrillation: Desired Effect Achieved

CA2I Epinephrine: Desired Effect Achieved

CA2K Lidocaine: Desired Effect Achieved

CA2L Return of Spontaneous Circulation (ROSC)

CA2M Admit to Emergency Department

CA2N Survival to Hospital Discharge

We would appreciate your taking this opportunity to review and comment on the proposed plan. Written comments will be accepted until Wednesday, June 30 at 5:00 p.m. Comments may also be sent via e-mail to <a href="https://www.vhastings.com/yhstocounty.gov">Vhastings.com/yhstocounty.gov</a>.

VH/CS//DF/wp Enc.

ICEMA CORE INDICATOR INDEX # CA1C	PULSELESS V-FIB or V-TA	ACH - UNWITNESSED		
Measure	Automatic External Defibrillation (AED) Performed by EMS Personnel			
CORE INDICATOR REF	CARDIAC - ADULT TREATMENT PROTOCOL UTILL	ZATION		
#CA1 Objective	□ to measure % of patients who re	ceive defibrillation by automatic or		
	personnel	lator and performed by on-duty EMS		
Classification	□ medical care - clinical			
Type of Measure	□ Process			
Domain of Performance	□ Patient Care			
Indicator Reporting Value	□ %			
Display Format	□ List			
April 1 Chapter Committee	□ Cube Chart			
	□ Bar Chart			
The second secon	☐ Line Graph			
	□ Process Control Chart □ Monthly x 12			
Frequency of Display				
Measures of Central Tendency		mean - Yes		
The probability of the second	mode - No			
	□ variance - No □ standard deviation - Yes			
Trending Analysis	□ NA			
Minimum Data Values	□ 30 values per measure			
Sampling	□ Periodic - Rate			
Aggregation	□ Yes			
Blinded	□ Yes			
Beta Testing	□ None to Date			
Population Denominator (D)		o suffer a pulseless VF or VT event		
Denominator	Inclusion Criteria	EMSA Data Elements		
	□ patient has reached age 15	□ EMSA #36		
	□ patient 14 years or younger			
	□ patient has suffered a VF or	□ EMSA #54VTAC, 54VFIB		
The second secon	VT event)	□ EMSA #54C-A		
	□ patient was pulseless (patient VF or VT	□ EMSA #54		
	<ul><li>event was in prehospital</li></ul>			
	setting	□ EMSA #52		
	□ patient VF & VT event was			
	not witnessed by EMS	DEFECA HII		
	personnel	□ EMSA #11		
	specified time period			
Denominator Data Source	EMS Medical Records			

Population Subset Numerator	defibrillation by automatic or semi-automatic external defibrillator and			
(N)		performed by on-duty EMS personnel		
Numerator	2,000,000	lusion Criteria	_	A Data Elements
		patients who survive to arrival	<b>u</b> )	
and the second of the second o		at emergency department		
Numerator Data Source		EMS Medical records		
Description of Indicator		numerator value (N) divided by	denon	ninator value (D) multiplied by
Formula		100 equals percentage (%)		
Indicator Formula		N/D = %		
Numeric Expression	a remarks and		NAC HARMAN	
Linkage	Liı	ikage Options		A Data Elements
		name		EMSA #29
		dob	1	EMSA #35
when the second		age		EMSA #36
		gender	1	EMSA #38
		admit date		EMSA#?
		procedures		EMSA #73
Stratification		Options	The second second second	EMSA Data Elements
		by age	3	EMSA #36
Single Plant of the Control of the C		by gender		EMSA #38
		by incident type	1	EMSA #8
The second secon		by response times	1	EMSA #17-20
		by scene times	1	EMSA #8
		by provider level		EMSA #73
Indicator Exclusion Criteria		non-cardiac etiologies,		
The second secon		cardiac etiologies where resusc	itation	was not attempted by EMS
		personnel		
		use of manual defibrillator		
		defib performed by lay public		uty medical professional
		event witnessed by EMS perso		4
		patient has not survived to hos	oital en	nergency department
References		Utstein Model; Pitt, Penn Kass	LE. O	ne Year Survival after
		Prehospital Cardiac Arrest: Th		
		Suburban EMS System. Ann	of Eme	rg Med; 12:1/-20, 1994
		Wisconsin study; Olson DW, I	MD. EP	MT-Defibrillation: The Wisconsin
		Experience; Ann of Emerg M	ed, 183	8;806, 1989
4				D. Considerations for Improving
		Survival from Out of Hospital		
		Ann of Emerg Med 15:10;118	1, 1986	), Amout in Ontonio, Com Mad
		Ontario, Canada; Brison RJ. C	ardiac	Arrest in Ontario; Can Med
		Assoc J; 191-199, 1992		
Source		California EMSA Vision Proje	ct	

ICEMA CORE INDICATOR	PULSELESS V-FIB/TACH_UNWITNESSED					
Index # CA1E						
Measure	Prehospital Defibrillation: Frequency of Administration					
CORE INDICATOR REF	CARDIAC - ADULT TREATMENT PROTOCOL UTILIZATION					
#CA1 Objective		ng a pulseless ventricular fibrillation				
Objective	(VF) or ventricular tachycardia (VT) event, which is, unwitnessed who					
	receive one or more defibrillator	receive one or more defibrillatory shocks in pre-hospital setting.				
Classification	☐ Medical care - clinical					
Type of Measure	Process C 1					
Domain of Performance	☐ Frequency, Compliance ☐ %					
Indicator Reporting Value Display Format	□ % □ List Chart					
Dispiay Format	☐ Cube Chart					
	□ Bar Chart					
	□ Line Graph					
	□ Process Control Chart					
Frequency of Display	□ Monthly x 12					
Measures of Central Tendency	□ mean - Yes □ mode - No					
	u variance - No					
	□ standard deviation - No					
Trending Analysis	□ NA					
Minimum Data Values	□ 30 values per measure					
Sampling	□ Periodic - Rate					
Aggregation	□ Yes					
Blinded	□ Yes					
Beta Testing	None to Date					
Population Denominator (D)	the number of adult patients treated by EMS personnel for pulseless V-Fib/Tach unwitnessed					
- Denominator	Inclusion Criteria EMSA Data Elements					
	□ patient has reached age 15	□ EMSA#				
	patient 14 years or younger	D EMCA#				
	patient treated by EMS	□ EMSA# □ EMSA#				
	personnel for pulseless V- Fib/Tach,	LAVIDA W				
	☐ Event is unwitnessed by EMS	□ EMSA#				
	personnel					
	□ event was in prehospital	□ EMSA#				
	setting					
Description of the Carry	□ specified query time period □ EMS Medical Records					
Denominator Data Source	in Envis intented records					
Population Subset Numerator		eive one or more defibrilatory shocks in				
(N)	the prehospital setting by EMS	provider personnel				
Numerator	Inclusion Criteria	EMSA Data Elements				
	patients who receive shock	□ EMSA#				
	from any type of defib unit patient who receive shock					
	patient who receive shock from any provider; lay or					
	professional					
	patient's who are treated in					
	prehospital setting					

Numerator Data Source		EMS Medical Records		
Description of Indicator		numerator value (N) divided by denominator value (D) multiplied by		
Formula		100 equals percentage (%)		
Indicator Formula		N/D = %		
Numeric Expression				
Linkage	Lir	rkage Options	EMSA Data Elements	
		name	□ EMSA#	
		dob	□ EMSA#	
		age	□ EMSA#	
		gender	□ EMSA#	
		admit date	□ EMSA#	
		procedures	□ EMSA#	
Stratification		Options	EMSA Data Elements	
		by age	□ EMSA#	
		by gender	□ EMSA#	
		by incident type	□ EMSA#	
		by response times	□ EMSA#	
		by scene times	□ EMSA#	
	<u> </u>	by provider level	□ EMSA#	
Indicator Exclusion Criteria		non-cardiac etiologies,		
		cardiac etiologies where pulsele		
		event was witnessed by EMS personnel		
The second secon	0	event not treated by EMS perso		
References		Utstein Model; Pitt, Penn Kass LE. One Year Survival after		
			Utstein Model applied to Rural-	
		Suburban EMS System. Ann o		
		Wisconsin study, Olson DW, MD. EMT-Defibrillation: The Wisconsin		
Approximation of the second se		Experience; Ann of Emerg Med, 18:8;806. 1989		
		Seattle Washington; Weaver DW, MD. Considerations for Improving		
	1	Survival from Out of Hospital		
	_	Ann of Emerg Med 15:10;1181		
and early agreement to gave off the first of the con-			ardiac Arrest in Ontario; Can Med	
The state of the s		Assoc J; 191-199, 1992		
Source		California EMSA Vision Proje	<b>T</b>	

ICEMA CORE INDICATOR INDEX # CA2C	PULSELESS V-FIB or V-T/	ACH - WITNESSED			
Measure	Automatic External Defibrillation (AED) Performed by EMS Personnel				
CORE INDICATOR REF #CA2	CARDIAC - ADULT TREATMENT PROTOCOL UTILI	ZATION			
Objective	to measure % of patients who re semi-automatic external defibril personnel on pulseless V-Fib/Ta	ceive defibrillation by automatic or lator and performed by on-duty EMS			
Classification	□ medical care - clinical				
Type of Measure	□ Process				
Domain of Performance	□ Patient Care				
Indicator Reporting Value	U %	3			
Display Format	□ Cube Chart □ Bar Chart □ Line Graph				
	Process Control Chart				
Frequency of Display	Monthly x 12				
Measures of Central Tendency	mean - Yes mode - No				
TERMINATION OF STORY OF STORY OF STORY	□ variance - No				
	□ standard deviation - Yes				
Trending Analysis	□ NA				
Minimum Data Values	□ 30 values per measure				
Sampling	Periodic - Rate				
Aggregation	□ Yes				
Blinded	□ Yes				
Beta Testing	□ None to Date				
Population Denominator (D)		o suffer a pulseless VF or VT event			
Denominator	witnessed by EMS personnel Inclusion Criteria	EMSA Data Elements			
Denominator	Inclusion Cineria	ENISA Data Elements			
The second secon	□ patient has reached age 15	□ EMSA #36			
	patient 14 years or younger				
	□ patient has suffered a VF or	□ EMSA #54VTAC, 54VFIB			
	VT event)   EMSA #54C-A				
The second secon	<ul><li>patient was pulseless (patient</li></ul>				
	VF or VT □ EMSA #54				
	event was in prehospital				
	setting	□ EMSA #52			
	patient VF & VT event was witnessed by EMS personnel				
	specified time period	□ EMSA #11			
Denominator Data Source	EMS Medical Records				
		:			

Population Subset Numerator					
(N)	71.	performed by on-duty EMS personnel usion Criteria EMSA Data Elements			
Numerator .	Co. 11 25 C.		☐ discharge status (TBD)		
The state of the s		patients who survive to hospital discharge	u discharge status (166)		
Numerator Data Source		EMS Medical records			
Description of Indicator		numerator value (N) divided by	denominator value (D) multiplied by		
Formula		100 equals percentage (%)			
Indicator Formula		N/D = %			
Numeric Expression	De verse	A Section of the sect	The state of the s		
Linkage	Li	akage Options	EMSA Data Elements		
		name	□ EMSA #29		
		dob	□ EMSA #35		
		age	□ EMSA #36		
		gender	□ EMSA #38		
100 March 1997 (1997)		admit date	□ EMSA # ?		
The state of the s	0	procedures	□ EMSA #73		
Stratification		Options	EMSA Data Elements		
		by age	□ EMSA #36		
The second secon		by gender	□ EMSA #38		
		by incident type	□ EMSA #8		
		by response times	□ EMSA #17-20		
		by scene times	□ EMSA #8		
		by provider level	□ EMSA #73		
Indicator Exclusion Criteria		non-cardiac etiologies,			
			citation was not attempted by EMS		
		personnel			
		use of manual defibrillator			
		defib performed by lay public of	or on-duty medical professional		
The second secon		event not witnessed by EMS p			
the state of the s		patient has not survived to hosp			
References		Utstein Model; Pitt, Penn Kass LE. One Year Survival after			
	1		e Utstein Model applied to Rural-		
	_	Suburban EMS System. Ann o			
			MD. EMT-Defibrillation: The Wisconsin		
		Experience; Ann of Emerg Me			
	0		W, MD. Considerations for Improving		
	1	Survival from Out of Hospital			
	_	Ann of Emerg Med 15:10;118			
			ardiac Arrest in Ontario; Can Med		
	1_	Assoc J; 191-199, 1992			
Source		California EMSA Vision Proje	ect		

ICEMA CORE	PULSELESS V-FIB/TACH WIT	NESSED.		
INDICATOR		The second secon		
Index # CA2E		to the second se		
Measure	Prehospital Defibrillation: Freq	uency of Administration		
CORE INDICATOR REF	CARDIAC - ADULT TREATMENT PROTOCOL UTILI	ZATIONI		
#CA2 Objective		ing a pulseless ventricular fibrillation		
		(VT) event, which is, witnessed who		
	receive one or more defibrillatory shocks in pre-hospital setting.			
Classification	☐ Medical care - clinical			
Type of Measure	□ Process			
Domain of Performance	☐ Frequency, Compliance			
Indicator Reporting Value	□ %			
Display Format	□ List Chart			
	☐ Cube Chart			
	□ Bar Chart	·		
	☐ Line Graph			
The same of Display	☐ Process Control Chart ☐ Monthly x 12			
Frequency of Display Measures of Central Tendency	☐ Monthly x 12 ☐ mean - Yes			
Measures of Central Tenacies	□ mode - No			
The second secon	□ variance - No			
	□ standard deviation - No			
Trending Analysis	□ NA			
Minimum Data Values	□ 30 values per measure			
Sampling	☐ Periodic - Rate			
Aggregation	□ Yes			
Blinded	□ Yes			
Beta Testing	□ None to Date			
Population Denominator (D)	<ul><li>the number of adult patients treating</li><li>Fib/Tach witnessed</li></ul>	ated by EMS personnel for pulseless V-		
Denominator	Inclusion Criteria	EMSA Data Elements		
	□ patient has reached age 15	□ EMSA#		
The second secon	□ patient 14 years or younger			
	<ul><li>patient treated by EMS</li></ul>	□ EMSA#		
	personnel for pulseless V- Fib/Tach.	□ EMSA#		
	☐ Event is witnessed by EMS personnel	□ EMSA#		
	event was in prehospital setting	□ EMSA#		
	□ specified query time period			

Denominator Data Source	EMS Medical Records			
Population Subset Numerator	□ the number of patients	the number of patients who receive one or more defibrillatory shocks		
(N)	in the Prehospital settin			
Numerator	Inclusion Criteria	EMSA Data Elements		
and the second s	<ul> <li>patients who receive sh</li> </ul>	ock 🗆 EMSA#		
	from any type of defib	anit		
and the second of the second	□ patient who receive sho	ck		
	from any provider; lay	or		
	professional			
	patient's who are treate	d in		
	prehospital setting			
Numerator Data Source	☐ EMS Medical Records			
Description of Indicator		vided by denominator value (D) multiplied by		
Formula	100 equals percentage	(%)		
Indicator Formula	$\square N/D = \%$			
Numeric Expression	and the second s			
Linkage	Linkage Options	EMSA Data Elements		
	name	□ EMSA#		
	□ dob	EMSA#		
All Section 1997 And Section 1997	□ age	EMSA #		
	□ gender	EMSA #		
	□ admit date	EMSA#		
Stratification Stratification	<ul><li>procedures</li><li>Options</li></ul>	EMSA #  EMSA Data Elements		
эташкаю		□ EMSA #		
	□ by age □ by gender	EMSA#		
	□ by incident type	EMSA #		
	□ by response times	D EMSA#		
	□ by scene times	D EMSA #		
	□ by provider level	□ EMSA#		
Indicator Exclusion Criteria	non-cardiac etiologies,			
		re pulseless V-Fib/V-Tach not present		
	<ul><li>event was not witnesse</li></ul>			
	<ul> <li>event not treated by EN</li> </ul>			
References		nn Kass LE. One Year Survival after		
		rest: The Utstein Model applied to Rural-		
	Suburban EMS System	n. Ann of Emerg Med; 12:17-20, 1994		
	<ul><li>Wisconsin study; Olso</li></ul>	n DW, MD. EMT-Defibrillation: The Wisconsin		
		merg Med, 18:8;806. 1989		
		Yeaver DW, MD. Considerations for Improving		
		Iospital Cardiac Arrest.		
	Ann of Emerg Med 15			
		on RJ. Cardiac Arrest in Ontario; Can Med		
	Assoc J; 191-199, 199			
Source	California EMSA Visi	on Project		

ICEMA CORE	PULSELESS V-FIB/TACH WITN	<u>IESSED</u>		
INDICATOR				
Index # CA2H				
Measure	Epinephrine: Frequency of Adm	<u>sinistration</u>		
CODE INDICATION DEE	CARDIAC - ADULT			
CORE INDICATOR REF #CA1	TREATMENT PROTOCOL UTILIZ	ZATION		
Objective	to measure % of patients suffering			
Objective	witnessed who receive epinephri			
Classification	☐ Medical care - clinical	P		
Type of Measure	□ Process			
Domain of Performance	☐ Frequency, Compliance			
Indicator Reporting Value	□ %			
Display Format	□ List Chart			
	□ Cube Chart			
The second of th	□ Bar Chart			
	□ Line Graph			
Annual Conference of the Confe	☐ Process Control Chart			
Frequency of Display	☐ Monthly x 12			
Measures of Central Tendency	□ mean - Yes			
the second secon	□ mode - No			
	u variance - No			
	□ standard deviation - No			
Trending Analysis	□ NA			
Minimum Data Values	□ 30 values per measure			
Sampling	Periodic - Rate			
Aggregation	□ Yes			
- Blinded	□ Yes			
Beta Testing	□ None to Date	00 4 4 X7TS 1 FD 4		
Population Denominator (D)		suffer a pulseless V-Fib/Tach event -		
	witnessed in Prehospital setting	TWO IN A PI		
Denominator	Inclusion Criteria	EMSA Data Elements		
	patient has reached age 15	□ EMSA#		
	<ul><li>patient has reached age 15</li><li>patient treated by EMS</li></ul>	u emba#		
	personnel for pulseless V-	□ EMSA#		
	Fib/Tach.	□ EMSA#		
	event was witnessed by EMS			
	personnel in prehospital	□ EMSA#		
	setting			
	□ specified query time period	□ EMSA#		
Denominator Data Source	☐ EMS Medical Records			

Population Subset Numerator (N)		the number of patients who receive epinephrine			
Numerator	Inc	lusion Criteria	EMSA Data Elements		
	0	patient's who are treated in prehospital setting patients who receive one or	□ EMSA#		
	_	more doses of epinephrine			
	<u> </u>	subset of denominator EMS Medical Records			
Numerator Data Source			denominator value (D) multiplied by		
Description of Indicator Formula		100 equals percentage (%)	denominator varue (D) municipied by		
Indicator Formula Numeric Expression		N/D = %			
Linkage	T iv	kage Options	EMSA Data Elements		
Lilinap		name	□ EMSA#		
	_	dob	□ EMSA#		
		age	□ EMSA#		
		gender	□ EMSA#		
		admit date	□ EMSA#		
e production of the Conference		procedures	□ EMSA#		
Stratification		Options	EMSA Data Elements		
		by age	□ EMSA#		
		by gender	□ EMSA#		
		by incident type	□ EMSA#		
April 200 Sept. Se		by response times	□ EMSA#		
	0	by scene times	□ EMSA#		
	0	by provider level	□ EMSA#		
			□ EMSA#		
Indicator Exclusion Criteria		non-cardiac etiologies,			
			t not resuscitated by EMS personnel		
2 (1997) 1 (		event not witnessed by EMS pe			
		event not treated by EMS person	onnel		
References		Utstein Model; Pitt, Penn Kass	LE, One Year Survival after		
			e Utstein Model applied to Rural-		
	_	Suburban EMS System. Ann of Emerg Med; 12:17-20, 1994			
		Wisconsin study, Olson DW, MD. EMT-Defibrillation: The Wisconsin			
		Experience; Ann of Emergivit	Experience; Ann of Emerg Med, 18:8;806. 1989 Seattle Washington; Weaver DW, MD. Considerations for Improving		
		Seattle washington; weaver L	Cording Arrest Ann of Emera Med		
			Cardiac Arrest.Ann of Emerg Med		
	1.	15:10;1181, 1986.	ardiac Arrect in Ontario: Can Med		
		Ontario, Canada; Brison RJ. Cardiac Arrest in Ontario; Can Med Assoc J; 191-199, 1992			
Source		California EMSA Vision Proje	ect		
DUILL	<u> </u>	THE THE PARTY AND THE PARTY AN			

ICEMA CORE INDICATOR	<u>PU</u>	SELESS V-FIB/TACH UNW	TNE	<u>ESSED</u>
Index # CA2J				
Measure	Lidocaine: Frequency of Administration			
Wedsule			e de la compansión de l	
CORE INDICATOR REF	CA	RDIAC - ADULT		
#CA1		EATMENT PROTOCOL UTILIZ	ZAT	ION
Objective	□ to measure % of patients suffering from pulseless V-Fib/Tach –			
	witnessed who receive Lidocaine in pre-hospital setting.			
Classification	0	Medical care - clinical		
Type of Measure		Process		
Domain of Performance	<u></u>	Frequency, Compliance		
Indicator Reporting Value	0	0/0		
Display Format		List Chart		
		Cube Chart		
		Bar Chart Line Graph		
		Line Graph Process Control Chart		
Frequency of Display	<del>-</del> -	Monthly x 12		
Measures of Central Tendency	<del>-</del>	mean - Yes		
Measures of Central Tendency		mode - No		
		variance - No		
		standard deviation - No		
Trending Analysis	□ NA			
Minimum Data Values		30 values per measure		
Sampling	Períodic - Rate			
Aggregation				
Blinded	41			
Beta Testing	□ None to Date			
Population Denominator (D)	u the number of adult patients treated by EMS personnel for pulseless V-			
The second secon		Fib/Tach - witnessed.		
Denominator	Inclusion Criteria EMSA Data Elements			
		patient has reached age 15		EMSA#
		patient treated by EMS		EMSA #
		personnel for pulseless V-		EMSA #
	_	Fib/Tach -witnessed	0	EMSA #
		event was in prehospital		EMSA#
	1,	setting		
D. L. D. C.	<u> </u>	specified query time period  EMS Medical Records	L	
Denominator Data Source	1	ENIO MEGICAI RECUIUS		
Company of the compan				
Population Subset Numerator	10	the number of patients who reco	eive	Lidocaine in the Prehospital setting
Formation Subscription (N)	1 -	man armin or or procession 17 and 2000	, -	
Numerator	In	clusion Criteria	E	ASA Data Elements
	o	patient's who are treated in	o	EMSA#
		prehospital setting		
		patients who receive one or		
		more doses of Lidocaine		
10 10 10 10 10 10 10 10 10 10 10 10 10 1	0	Subset of denominator		
	و ا	time period for query match		
	E	denominator	<u></u>	

Numerator Data Source		EMS Medical Records		
Description of Indicator		numerator value (N) divided by denominator value (D) multiplied by		
Formula		100 equals percentage (%)		
Indicator Formula		N/D = %		
Numeric Expression				
Linkage	Lin	ikage Options	EN	ISA Data Elements
		name		EMSA#
		dob		EMSA#
Barrier Committee Co		age		EMSA #
		gender		EMSA#
		admit date		EMSA#
		procedures	0	EMSA#
Stratification		Options	5,42	EMSA Data Elements
		by age		EMSA#
A second		by gender		EMSA#
		by incident type		EMSA#
The second secon		by response times		EMSA#
		by scene times		EMSA#
		by provider level		EMSA#
and the second s				EMSA#
Indicator Exclusion Criteria		non-cardiac etiologies,		
		event not witnessed by EMS pe		
		event not treated by EMS perso		
References		Utstein Model; Pitt, Penn Kass LE. One Year Survival after		
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